

# **Public Hearing**

**July 31, 2013**

**Long Canyon  
Coal Lease by  
Application  
UTU-88953**

- **Environmental Assessment**
- **Fair Market Value**
- **Maximum Economic Recovery**

# Long Canyon Coal Lease Tract

- **Officials at this Meeting**
  - **BLM Utah State Office**
    - Roger Bankert – Hearing Official
    - Stan Perkes – Mining Engineer
    - Jeff McKenzie – Mining Engineer
  - **BLM Price Field Office**
    - Trish Clabaugh – Field Office Manager
    - Steve Rigby – Asst. Field Office Manager
    - Chris Conrad – Price Coal Geologist

Utah State Office



# Long Canyon Coal Lease Tract

- This hearing announced for two weeks per 43 CFR 3422 and 3425
  - Emery County Progress
  - Sun Advocate
- Published in the Federal Register July 9, 2013



# Long Canyon Coal Lease Tract Hearing

- **Agenda**
  - **Stan Perkes – Introduction, Authorities and Boundaries**
  - **Chris Conrad – Geology, In-Place Reserves**
  - **Chris Conrad – Environmental/NEPA**
  - **Jeff McKenzie – Mining, Reclamation and Fair Market Value (FMV), and Maximum Economic Recovery (MER)**
  - **Public Comment Period**



# **Public Hearing Long Canyon Coal Tract July 31, 2013**

## **Hearing 7:00-8:00 p.m. Procedures**

- **Please sign the register**
- **If you would like to speak - fill out speaker card(s)**
- **Court recorder will be present – Please speak slowly**
- **One topic per speaker card**
- **Submit all comments in writing even if you speak**
- **Speakers will have a maximum of 3 minutes per topic**
- **Speakers will be called up to provide comments on topic**
- **Questions will NOT be answered as part of the presentation**
- **Questions WILL be answered before/following the presentation**
- **Please be courteous to other speakers**



# Authorities

- Mineral Leasing Act of 1920 as amended
  - To Promote the mining of coal, ... on the public lands.
  - No bid shall be accepted which is less than the fair market value, ... . Prior to the determination of the Secretary, ..., the Secretary shall give opportunity for and consideration to public comments on the fair market value.
  - Prior to issuance of any coal lease the Secretary shall consider the effects of mining... including impacts on the environment. Public hearings in the area shall be held by the Secretary prior to the lease sale.
- Federal Lands Management and Policy Act
  - The public lands be managed In a manner which recognizes the nation's need for domestic sources of minerals, food, timber, and fiber from the public lands including implementation of the Mining and Minerals Policy Act of 1970 as it pertains to the public lands
  - The public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air, and atmospheric, water resource, and archeological values...
- Mining and Minerals Policy of 1970
  - It is the continuing policy of the Federal Government to foster and encourage private enterprise in the development of a stable domestic minerals industry and the orderly and economic development of domestic mineral resources. This act includes all minerals, including sand and gravel, geothermal, coal, and oil and gas.



# Long Canyon Coal Lease Tract

- Hearing Conducted -- 43 CFR 3425.4
- “Prior to holding a coal lease sale in response to an application, a public hearing shall be held on the environmental assessment or statement, the proposed sale and the fair market value and maximum economic recovery on the proposed lease tract.”



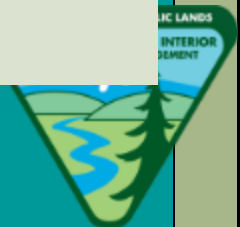
# Long Canyon Coal Lease Tract Fair Market Value

- BLM is seeking comments on any part of the Fair Market Value
- Fair Market Value
  - Costs, Coal quality information, restrictions that affects coal recovery, method of mining, price of the sold coal, comparable sales
  - Comment period closes 30 days from the date of this meeting
  - Send Comments to the Utah State Office



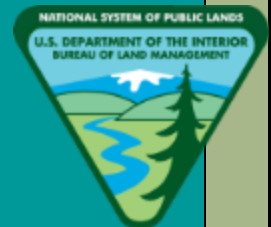
# Long Canyon Coal Lease Tract Environmental Analysis

- BLM is seeking comments on the Environmental Assessment for the Long Canyon Coal Tract
  - Comment period closes August 9, 2013
  - Send Comments to the Price Field Office
  - All substantive comment will be addressed as part of the EA



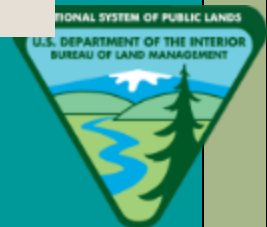
# Comments on FMV or EA

- Written
- Substantial
- Timely
- Cite sources if necessary
- FMV Comments can be held confidential if requested



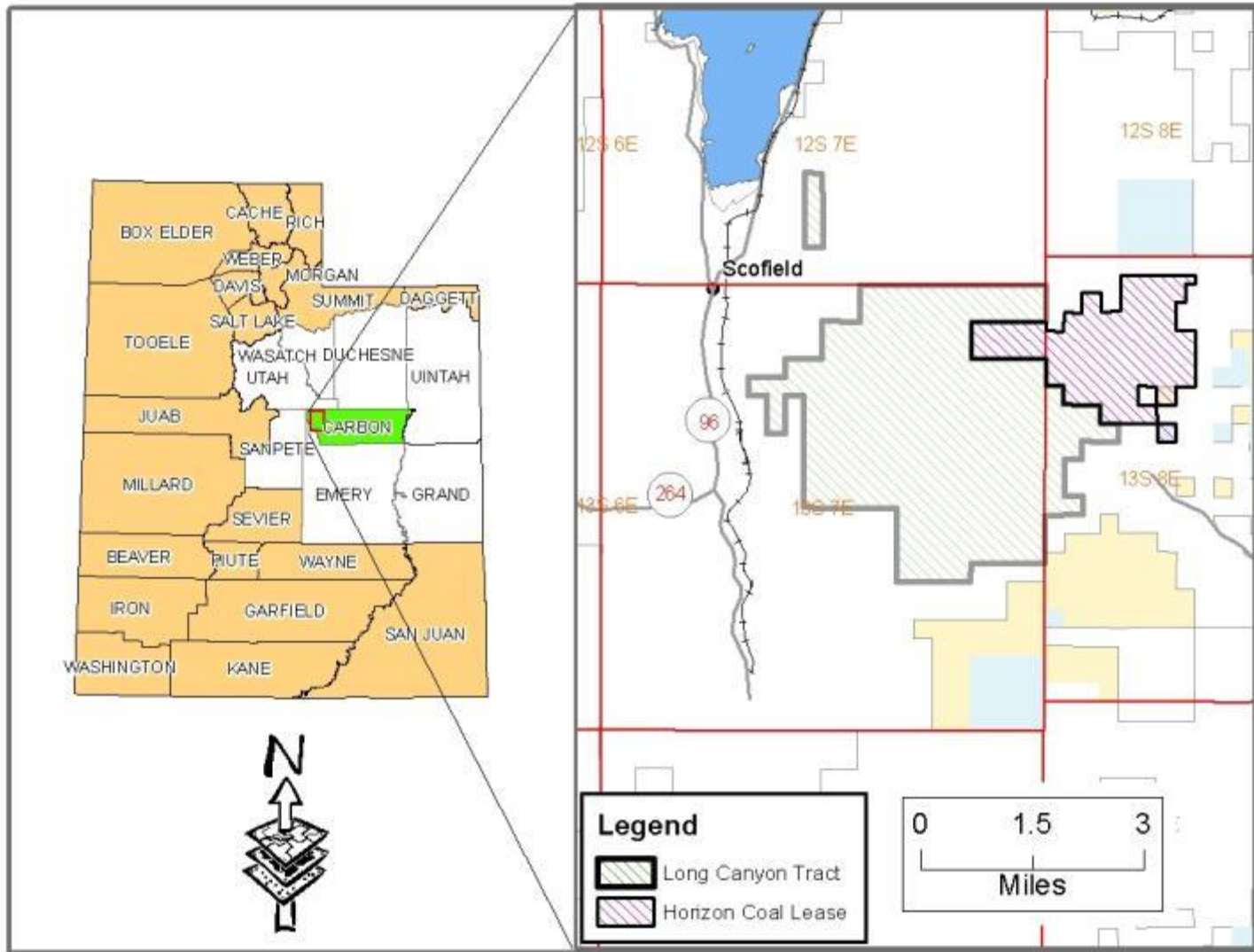
# Long Canyon Lease Application and Final Boundaries

- Application UTU-88953
- Filed on February 17, 2012
- Located in USGS Wasatch Plateau “Known Recoverable Coal Resource Area”
- Application 5,586.90 acres - Final BLM 7,677.17 acres
- Coal administered by BLM
- Surface is Private (Fee)

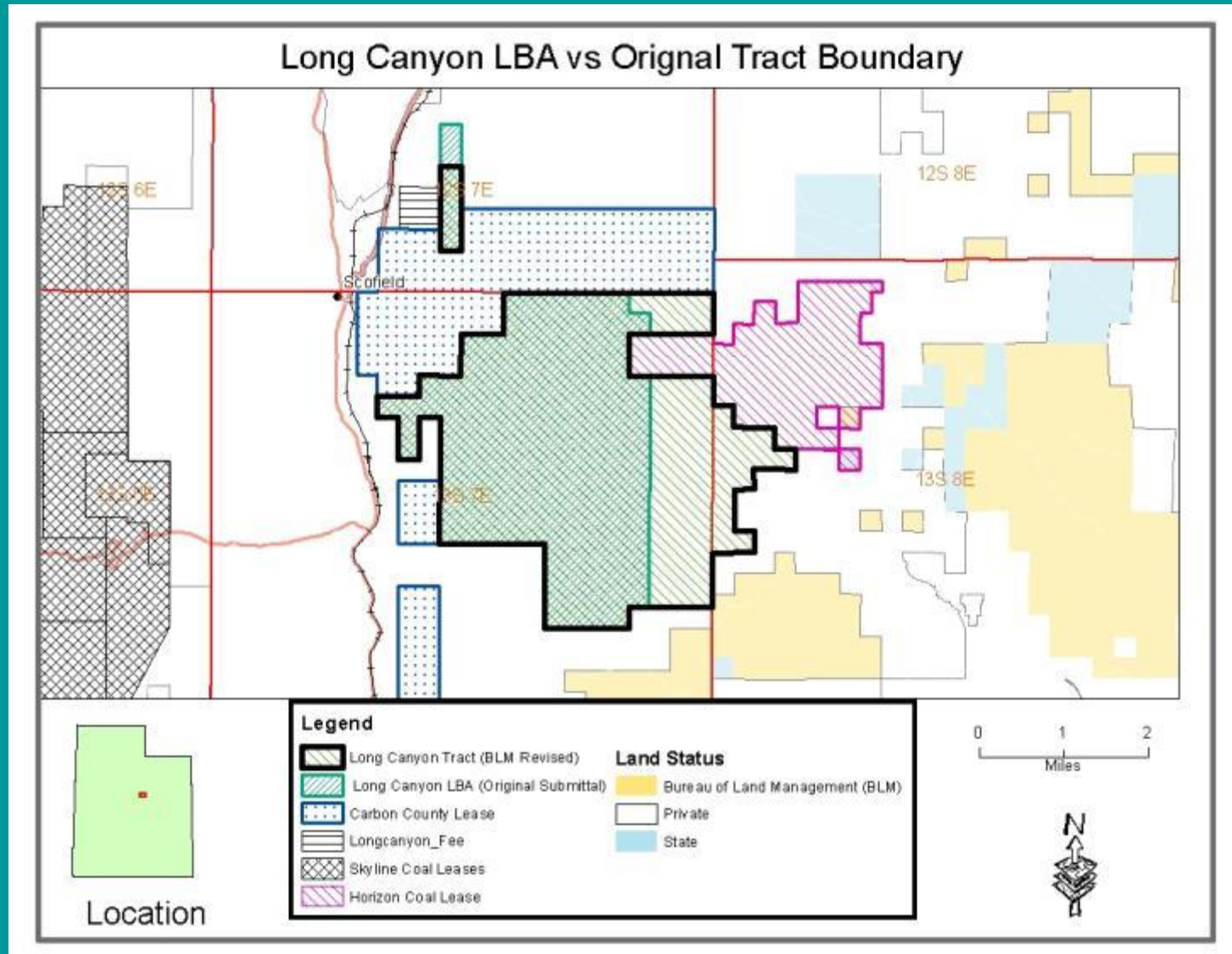


# Long Canyon Federal Coal Lease Tract Location

Utah State Office



# Map of Original Application Area and Final Tracts



# Long Canyon Coal Lease Tract

- Tracts boundaries were enlarged
  - Maximize coal mining potential
  - Ensure that Maximum Economic Recovery would be achieved
  - One time processing
- Underground Coal



# **Geology of the Long Canyon Coal Tract**

**Chris Conrad**

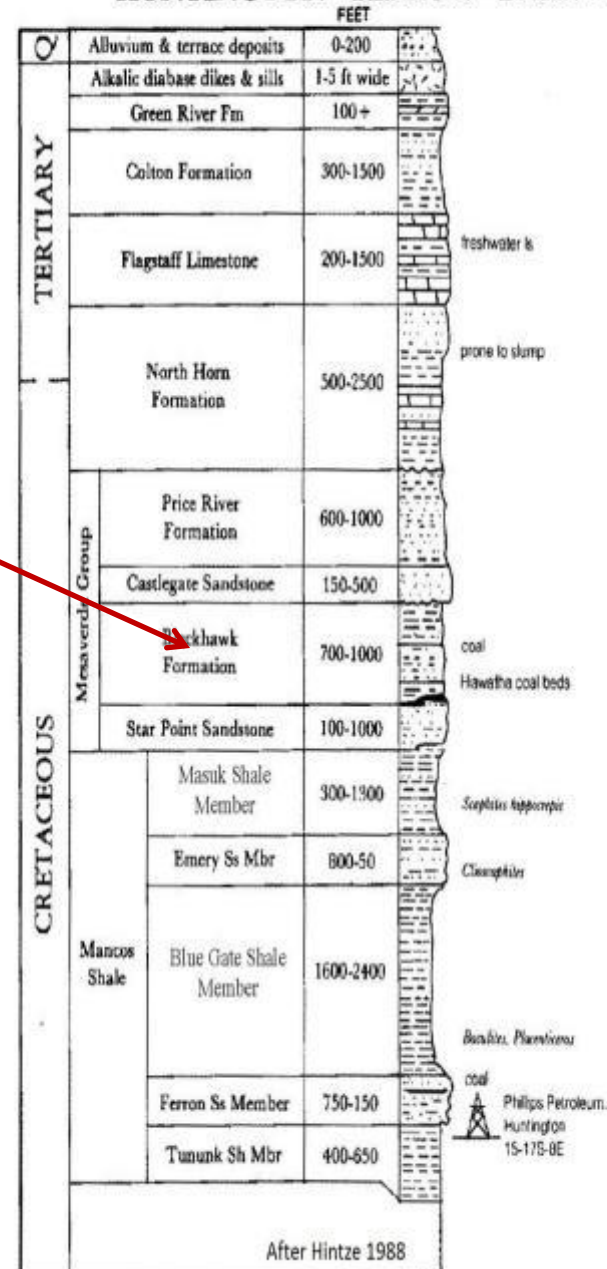


# Stratigraphy

- Cretaceous Period
- Black Hawk Formation
- Minal Coal Seams-  
Hiawatha
- and UP

## Geologic Cross-section for the Ferron Vicinity

HUNTINGTON · FERRON · EMERY

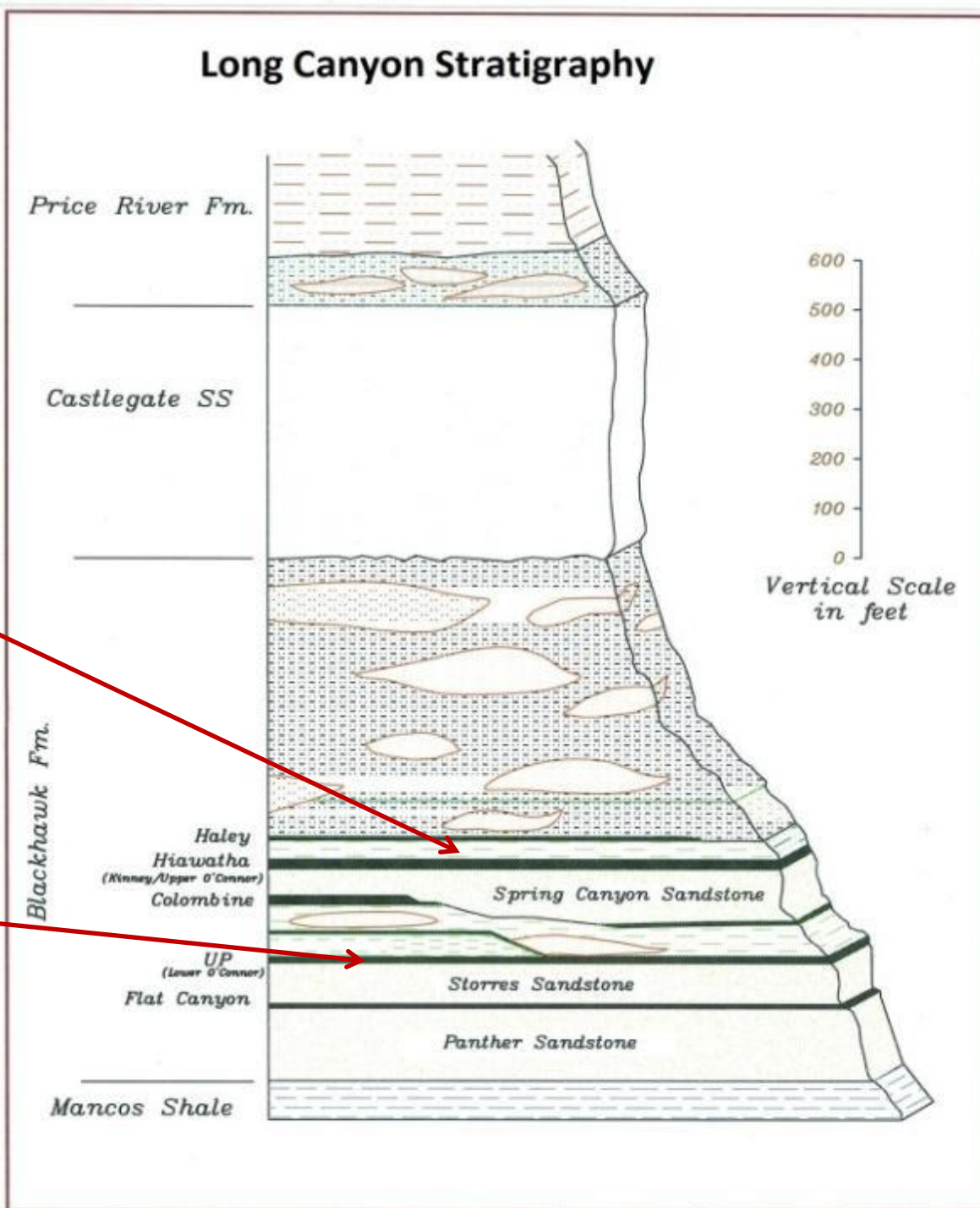




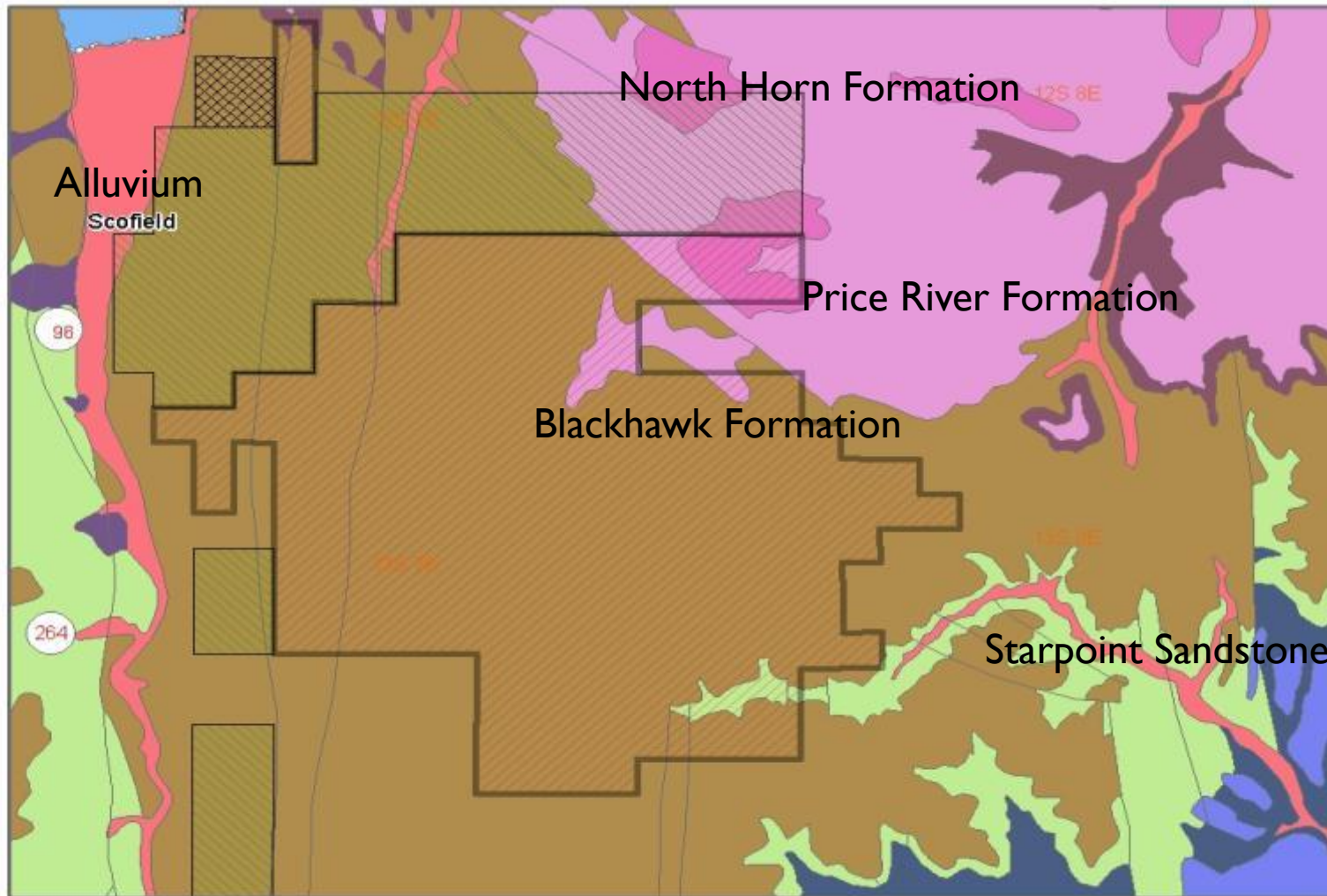
# Coal Seams

- Hiawatha

- UP

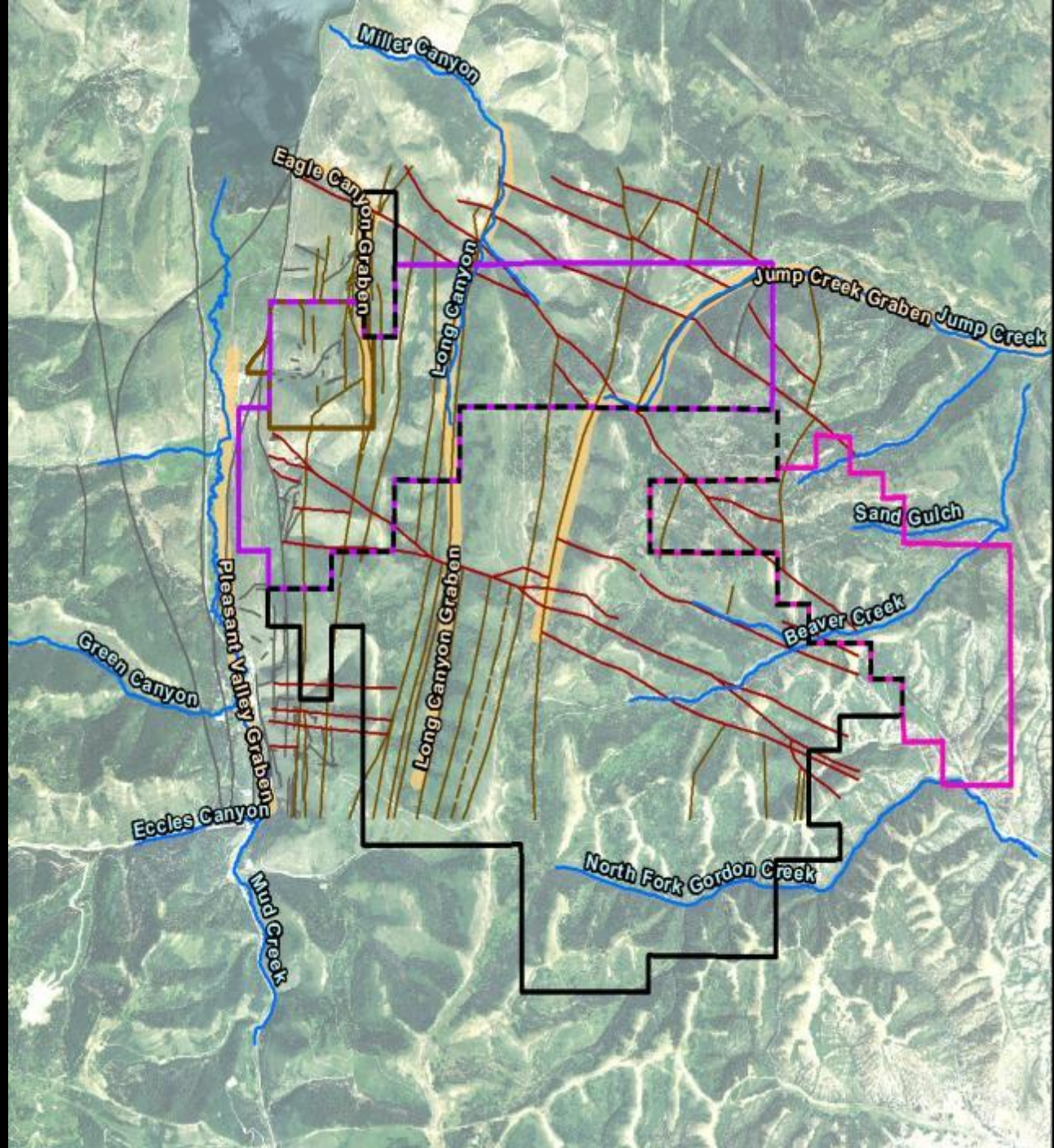


# Surface Geology





# Faults



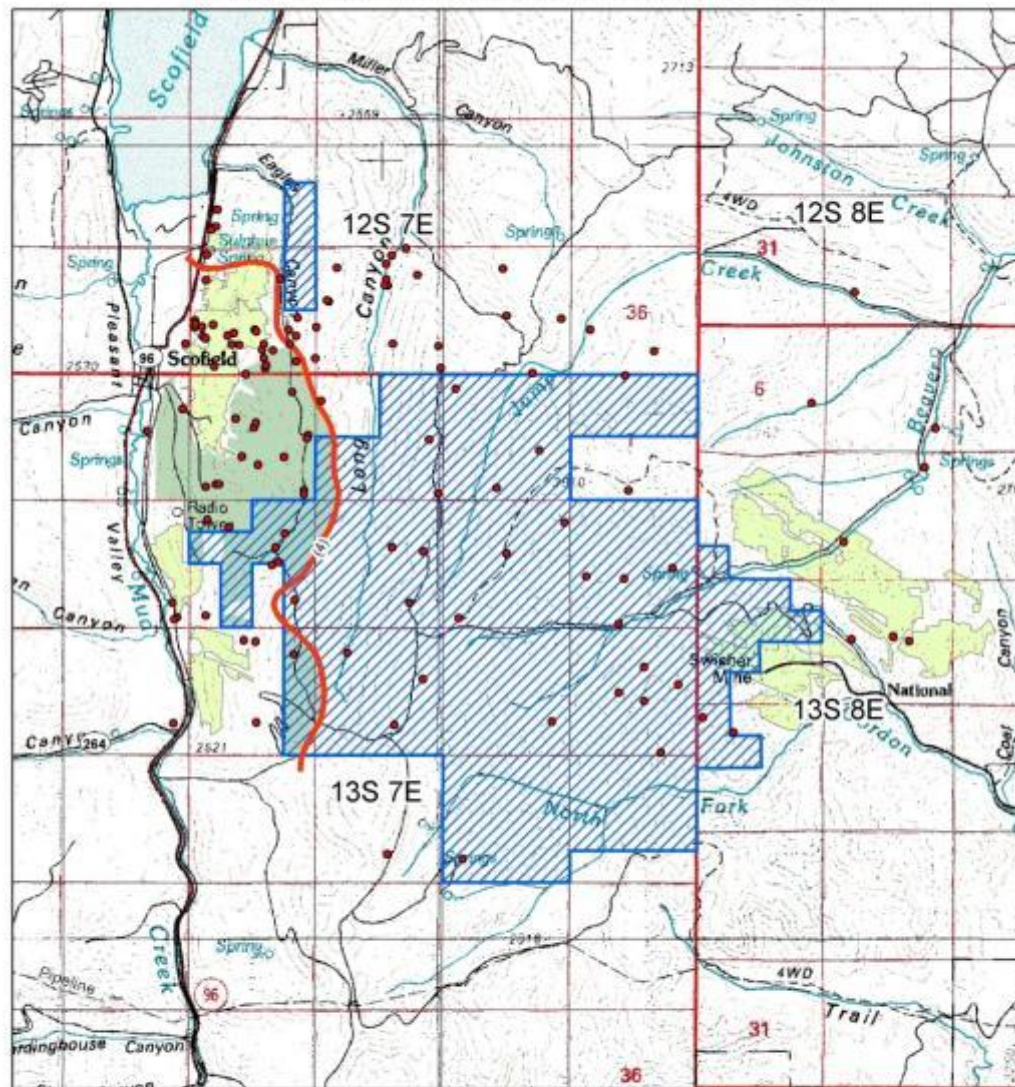
# Coal Quantity & Quality





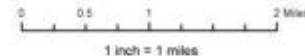
# Pacific Union

## Long Canyon LBA Union Pacific Seam



No warranty is made by the BLM for use of the data for purposes not intended by the BLM.

This product may not meet BLM standards for accuracy and content. Different data sources and input scales may cause some misalignment of data layers.

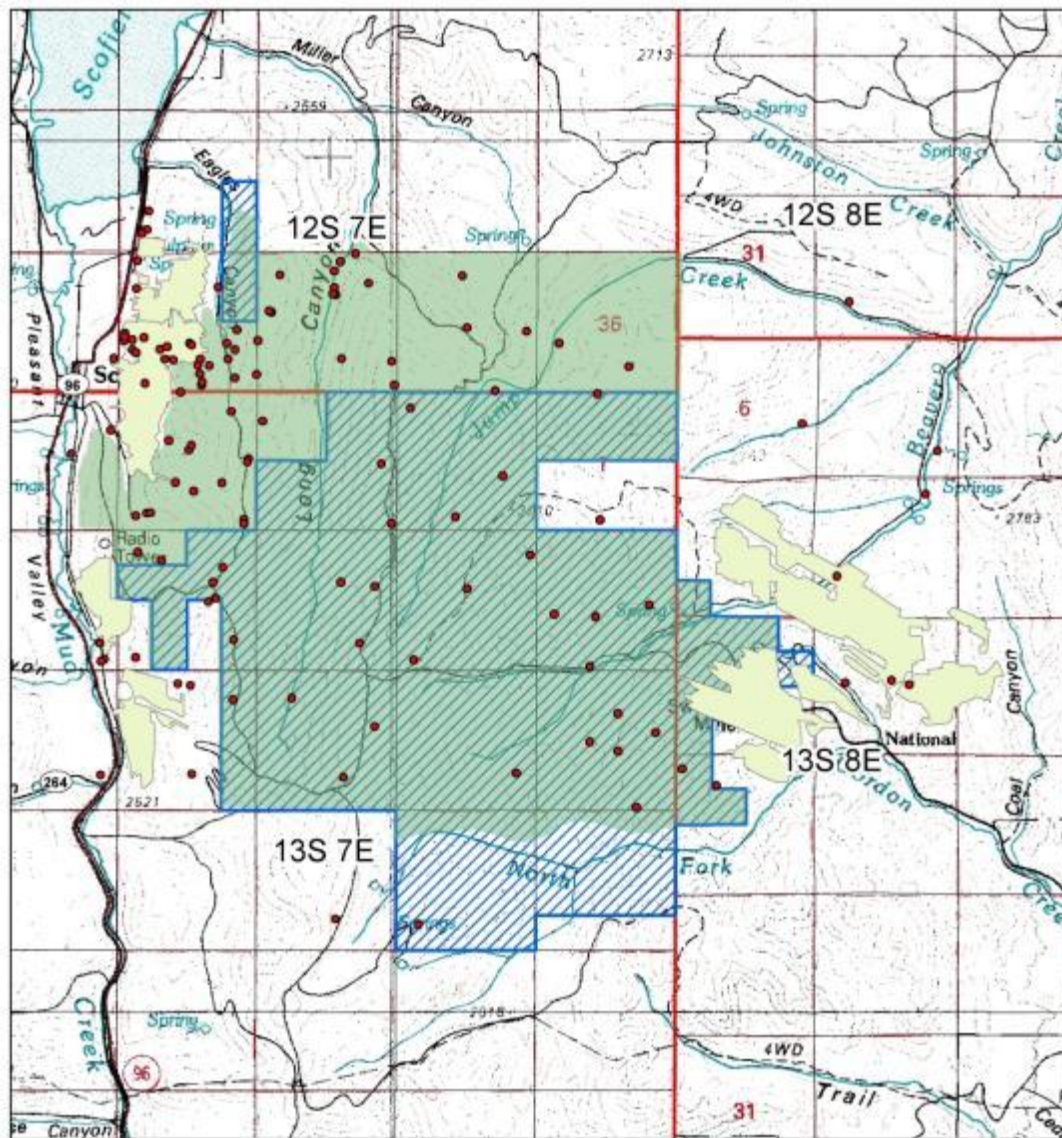


July 2013



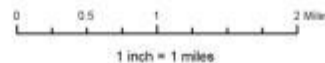
# Hiawatha

## Long Canyon LBA Hiawatha Seam



No warranty is made by the BLM for use of the data for purposes not intended by the BLM.

This product may not meet BLM standards for accuracy and content. Different data sources and input scales may cause some misalignment of data layers.



July 2013

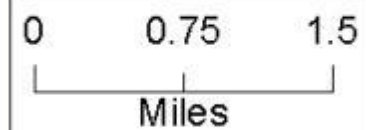




# In-Place Coal Resources Long Canyon Coal Tract

81.5 Million Tons

4 feet + Coal Thickness



Bed Name	Average Thickness (Feet)	Reserve Base (Tons)	Recoverable Reserves (50% of Reserve Base)
UP coal seam	6.0	5,000,000	2,500,000
Hiawatha	10.5	76,500,000	38,250,000
Total	8.2 (not a weighted ave.)	81,500,000	40,750,000

Coal Seam	Percent Moisture	Percent Ash	Percent Volatile Matter	Percent Fixed Carbon	Percent Sulfur	Heating Value Btu/lb
Hiawatha	9.5	6.1	40.8	46	0.6	12,056
UP	9.5	5.9	40.4	45.6	0.6	12,200



# Mining and Fair Market Value Long Canyon Coal Tract

Jeff McKenzie



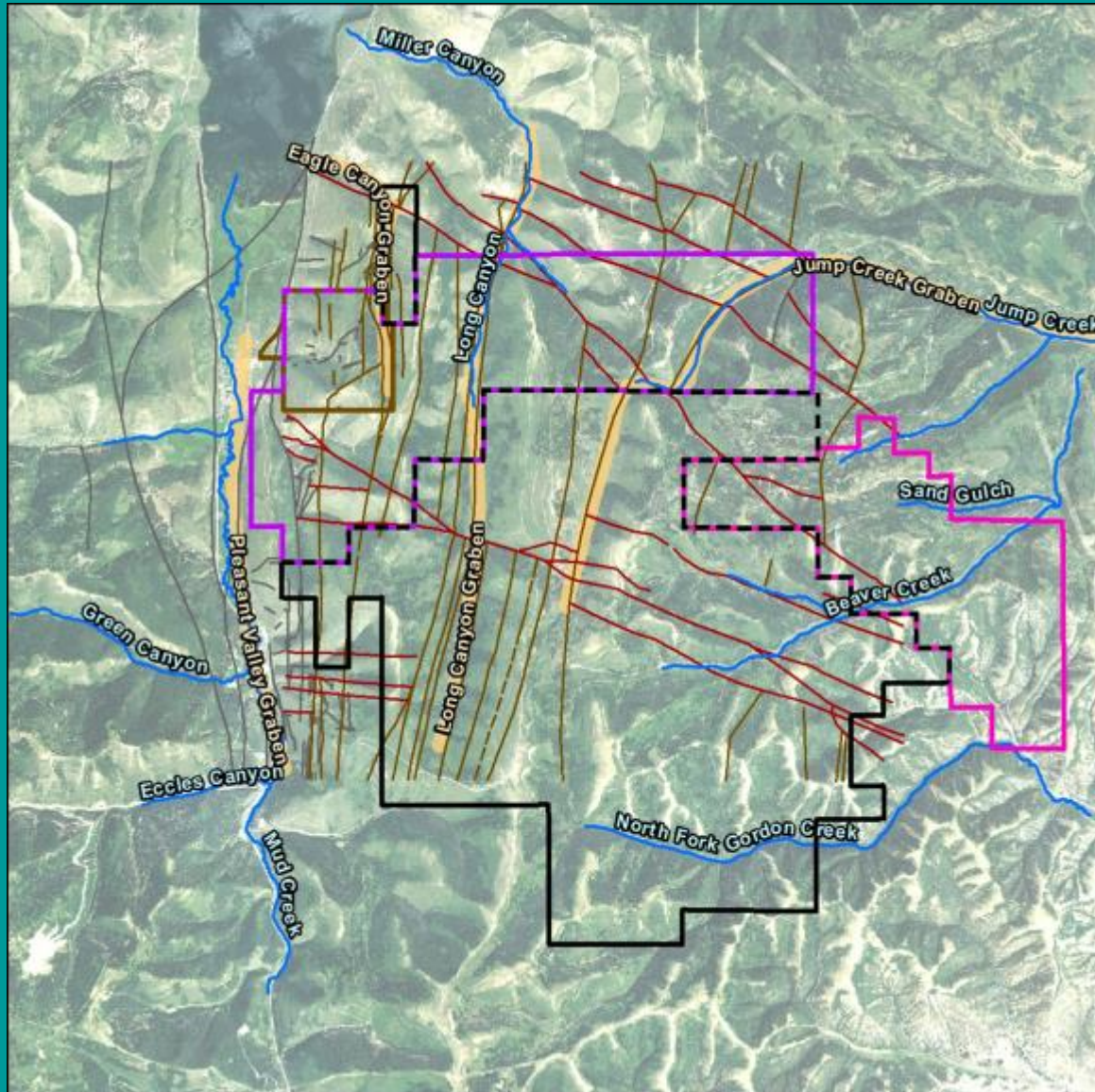
# LONG CANYON MINING

- **UP & Hiawatha Coal Seams**
  - 8.2 ft average
  - Overburden 1500 ft max, ave about 1000 ft
  - Dip 5-7 % to NW
  - Private surface
  - Some old works are possibly thermally hot
- 40.7 million tons @ 50% recovery
- Multiple access points
- Continuous Miner
- Possibly some Longwall



# Long Canyon Mining

Shallow, Good Quality, Faulted, Multiple Access



# Long Canyon Coal Mining

## at 2 million TPY Rate

- Coal energy – annual electrical generation
  - 361,000 homes
  - 936,000 people in Utah
- Employment
  - Direct mine-site employment: about 200 jobs
  - Direct and related employment: about 480 jobs
  - % equiv to 34,000 jobs in Salt Lake County
- Royalty payments:
  - Federal: \$5.6 million (about ½ back to State)
  - State of Utah: \$2.8 million / year (about ½)
  - Plus: Property Tax, Rentals, Abandoned Mine Land Fund, “Black Lung” Excise Tax, etc



# Long Canyon Coal Tract Fair Market Value (FMV)

BLM seeking information

Held CONFIDENTIAL (if requested)

- Value of any surface estate affected
- Information on Private coal sales
- Risk Factors
- Capital and Operating Costs Projection(s)
- Discount rate, depreciation, depletion
- Mining and Marketing Factors – Domestic and International



# Long Canyon Coal Tract Maximum Economic Recovery (MER)

- BLM seeking comments on MER
  - “Based on Standard Industry Operating Practices, all profitable portions of a leased Federal coal deposit must be mined” 43 CFR 3480.0-5(a)(21)
    - proven technology (equipment and mining method)
    - coal quality, quantity and marketability
    - safety
    - exploration, processing, operating and transportation costs
    - applicable laws and regulations
    - ensure conservation of coal and other resources-  
prevent wasting of coal



# Environmental Assessment Long Canyon Coal Tract

Chris Conrad



# Alternatives Discussion

- Purpose and Need
- Scoping
- Tribes
- Landowners
- Other Federal and State Agencies



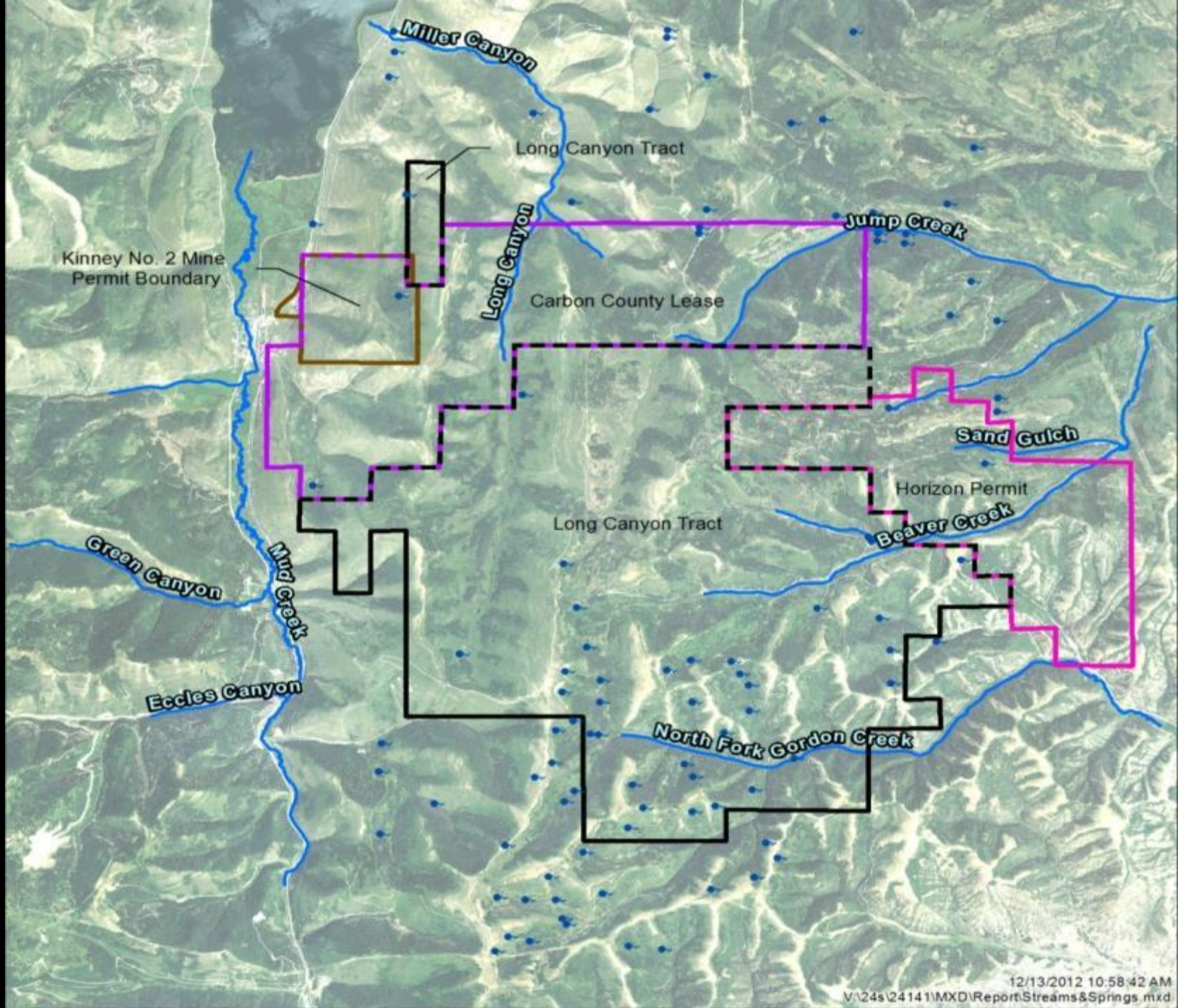


# 3 Alternatives

- A) No Action
- B) Protective Extraction
- C) Full Extraction

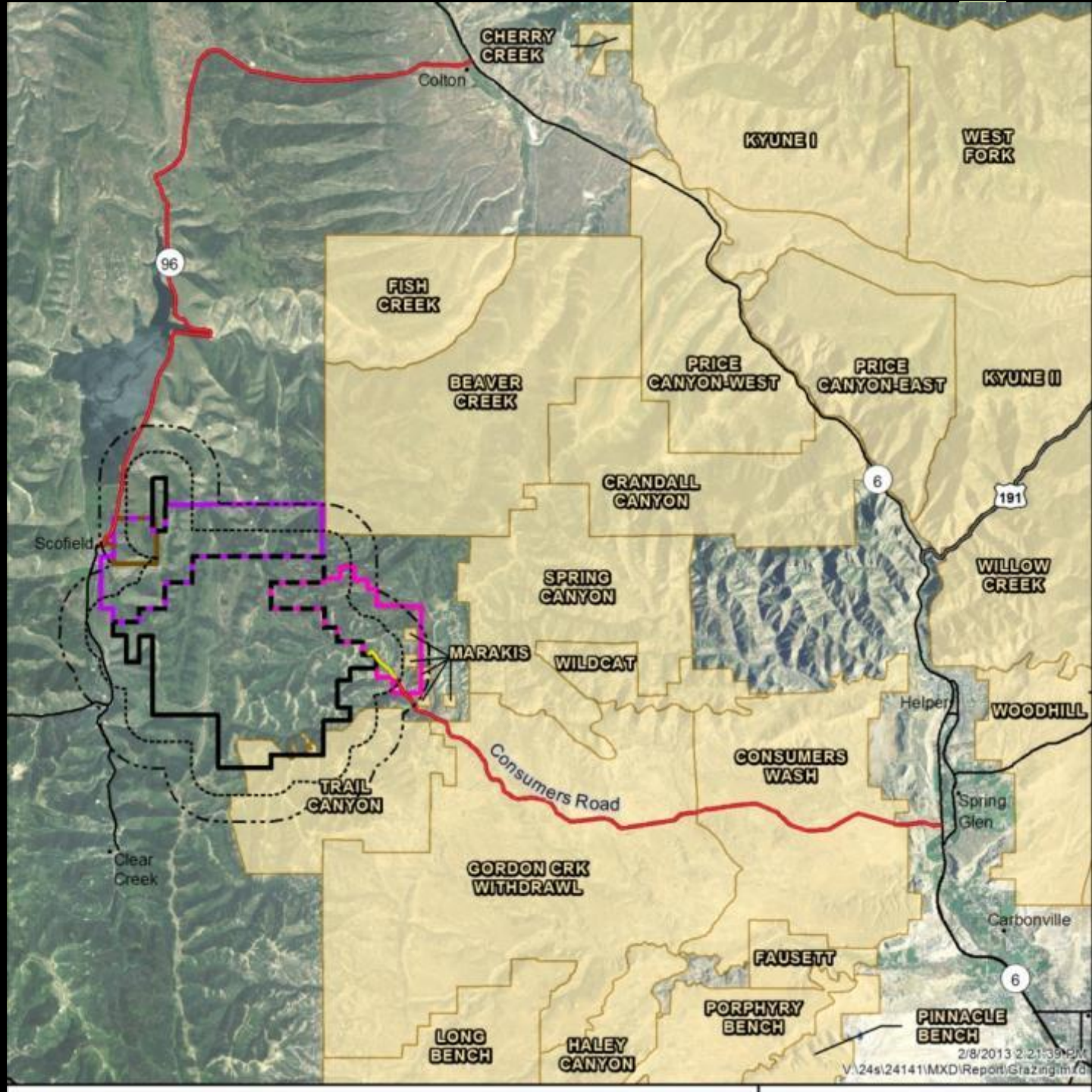


# Alternative





# Buffer Zones



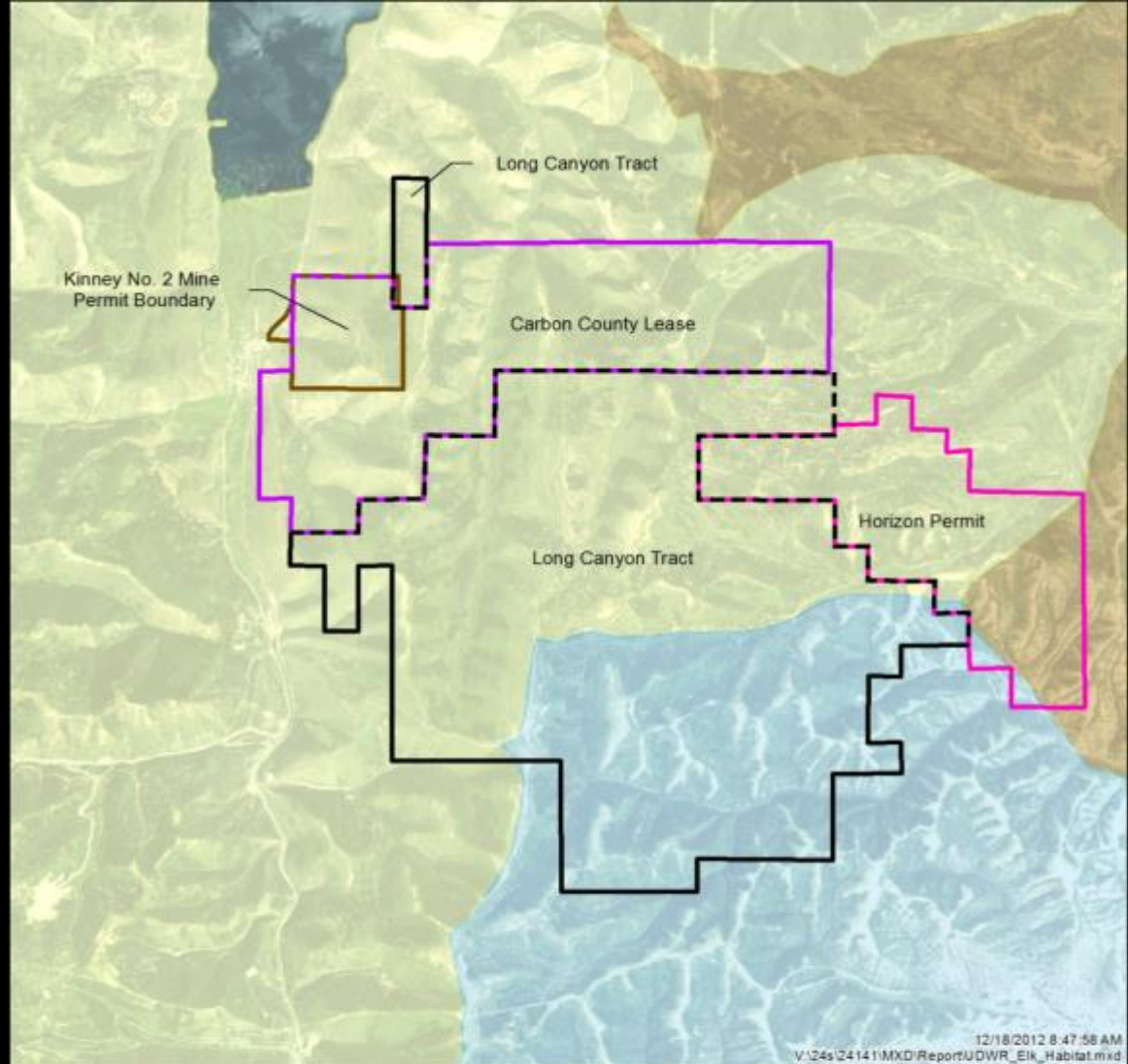
**Air Quality:**  
**Fugitive Dust, CO<sub>2</sub>**

**BLM Sensitive Animal Species**  
**Fish and Wildlife**

**Cultural**



# ELK



## Rocky Mountain Elk Habitat

- Summer, crucial
- Winter, crucial
- Year-long, crucial

- Long Canyon Tract
- Carbon County Lease
- Horizon Permit
- Kinney No. 2 Mine Permit Boundary



Imagery taken from National Agricultural Imagery Program (NAIP) natural color aerial photography 1-m resolution, 2011.

Contains Privileged Information: Do Not Release

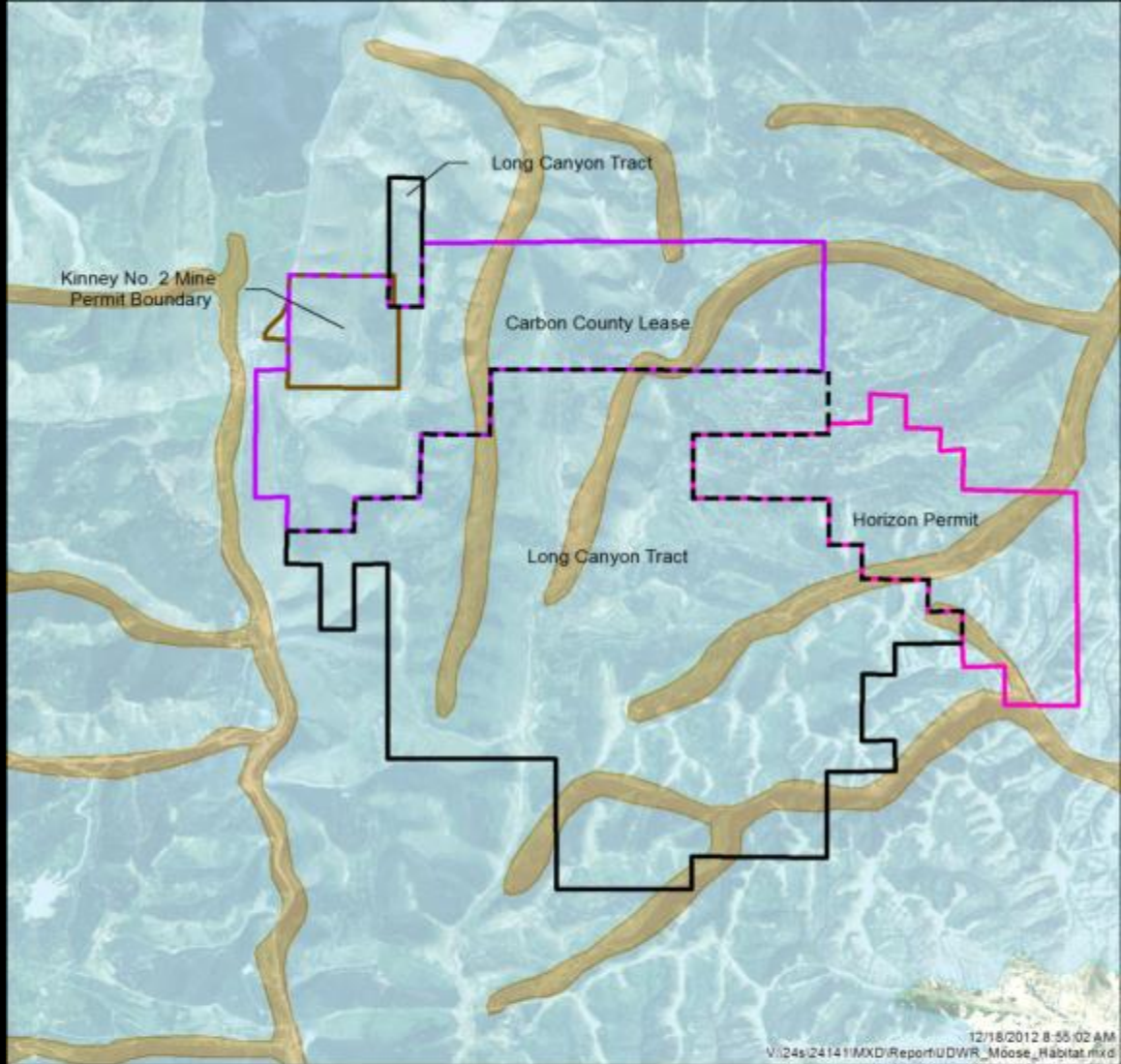


## Area Enlarged





# Moose



12/18/2012 8:55:02 AM  
V:\24s\24141\MXD\Report\UDWR\_Moose\_Habitat.mxd

## Moose Habitat

- Winter, crucial
- Year-long, crucial

- Long Canyon Tract
- Carbon County Lease
- Horizon Permit
- Kinney No. 2 Mine Permit Boundary



Imagery taken from National Agricultural Imagery Program (NAIP) natural color aerial photography 1-m resolution, 2011.

Contains Privileged Information: Do Not Release



## Area Enlarged



**Geology**  
**Mineral Resources**  
**Energy Production**

**Livestock Grazing**





Trail Canyon Allotment: Southeast of Long Canyon LBA  
10% of 420 AMUs                      42 AMUs NO EFFECT  
50% of 420 in Buffer Zone                      210 AMUs No EFFECT





# **Rangeland Health Standards**

A photograph of a rangeland landscape. In the foreground, there is dense, dry, yellowish-brown brush and grass. In the middle ground, a white SUV is parked on a dirt path. Behind the vehicle, there are several tall, thin, white-barked trees, likely aspens, without leaves. The background features a vast, open field of dry grass leading up to a large, brown, rocky mountain under a clear blue sky.

**Recreation**

**Socioeconomics**





**6 Bull ELK**  
**29 Cow Elk**

**35 Permits Total**  
**No Change**





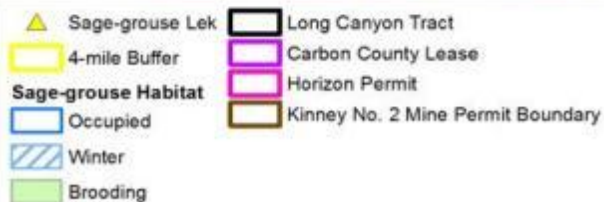
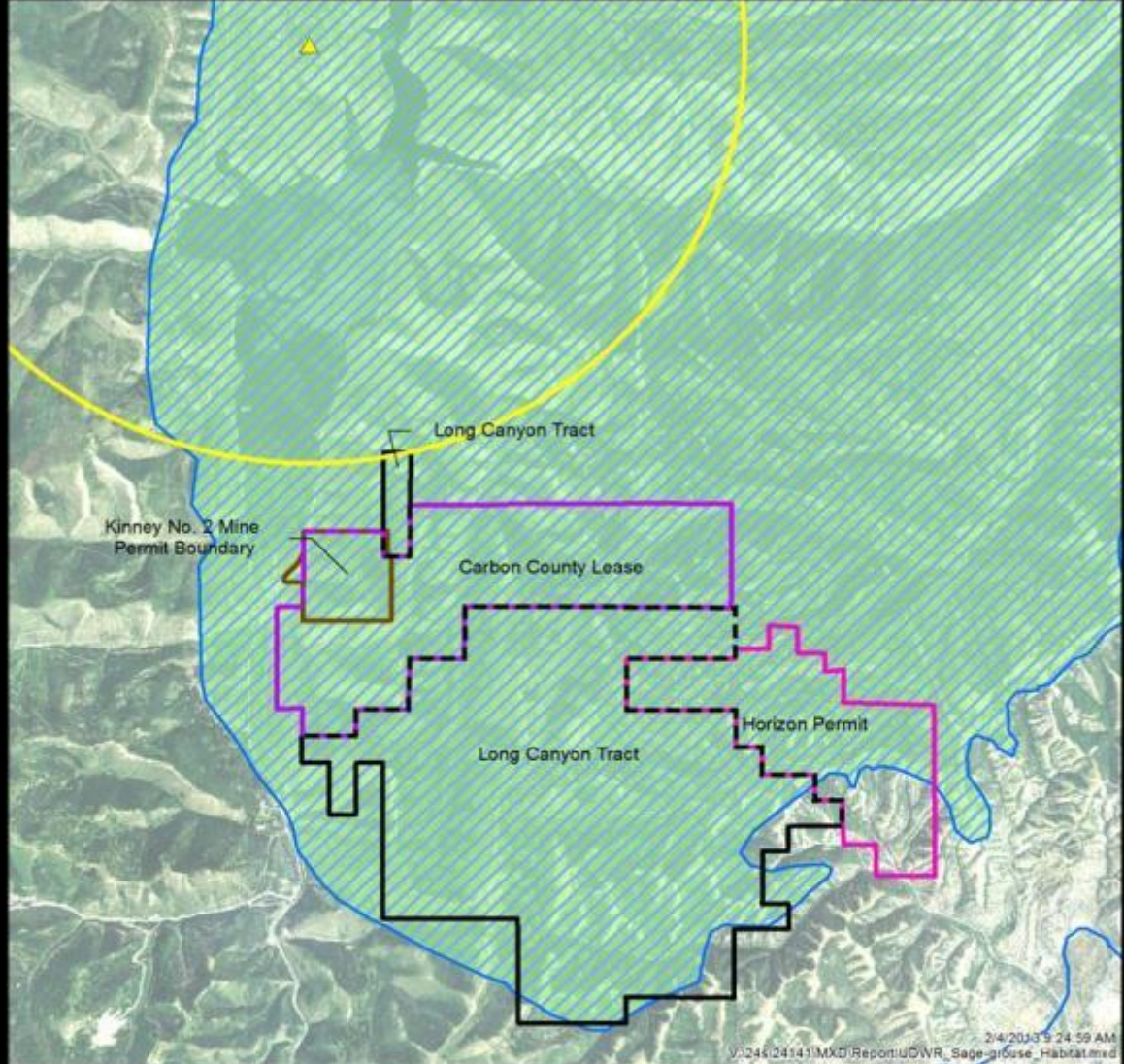
# **Threatened, Endangered, or Candidate Animal Species**

**Sage Grouse**





# Sage Grouse



Imagery taken from National Agricultural Imagery Program (NAIP) natural color aerial photography 1-m resolution, 2011.

Contains Privileged Information: Do Not Release



G  
S  
a  
g  
e  
r  
o  
u  
s  
e



GARY R. HERBERT

Governor

GREGORY S. BELL

Lieutenant Governor

## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER

Executive Director

Division of Wildlife Resources

GREGORY SHEEHAN

Division Director

May 14, 2013

Patricia Clabaugh  
Field Office Manager  
Bureau of Land Management  
125 South 600 West  
Price, UT 84501

Dear Ms. Clabaugh:

The Utah Division of Wildlife Resources (DWR) has reviewed the Kinney 2013 Federal Coal Exploration License Application and Long Canyon Tract Federal Coal Lease-by-Application environmental assessments. The license and exploration proposals are within areas identified as Sage-grouse Management Areas by the State of Utah. However, as identified in the state's *Conservation Plan for Greater Sage-grouse in Utah* (2013)

The GIS maps which accompany this Plan contain representations of these boundaries for informational purposes ... and are not intended to be the final authority for habitat delineation issues ... If in the review of any proposal or other action, differences between the maps and the on-the-ground situation become apparent, the on-the-ground boundaries shall control.

Based upon a more detailed site specific review, it has been determined by the DWR that the areas proposed for license and exploration, though within an SGMA, should be classified as non-habitat for greater sage-grouse. The topography is too steep and the north facing slopes are dominated by trees. When an area is classified as non-habitat, the above mentioned plan states "no specific management provisions are proposed for non-habitat areas within sage-grouse management areas except to ... note that, birds may fly over the non-habitat as they connect to other populations or seasonal habitat areas."

Thank you for consulting with the DWR to determine the precise delineation of sage-grouse habitat for this development proposal. Please employ the above determination in your analysis. If you have any questions, please call Makeda Hanson (435-630-0805) in our Price office.

Sincerely,

Bill Bates  
Regional Supervisor

JWB/mjh  
cc:  
Jared Reese





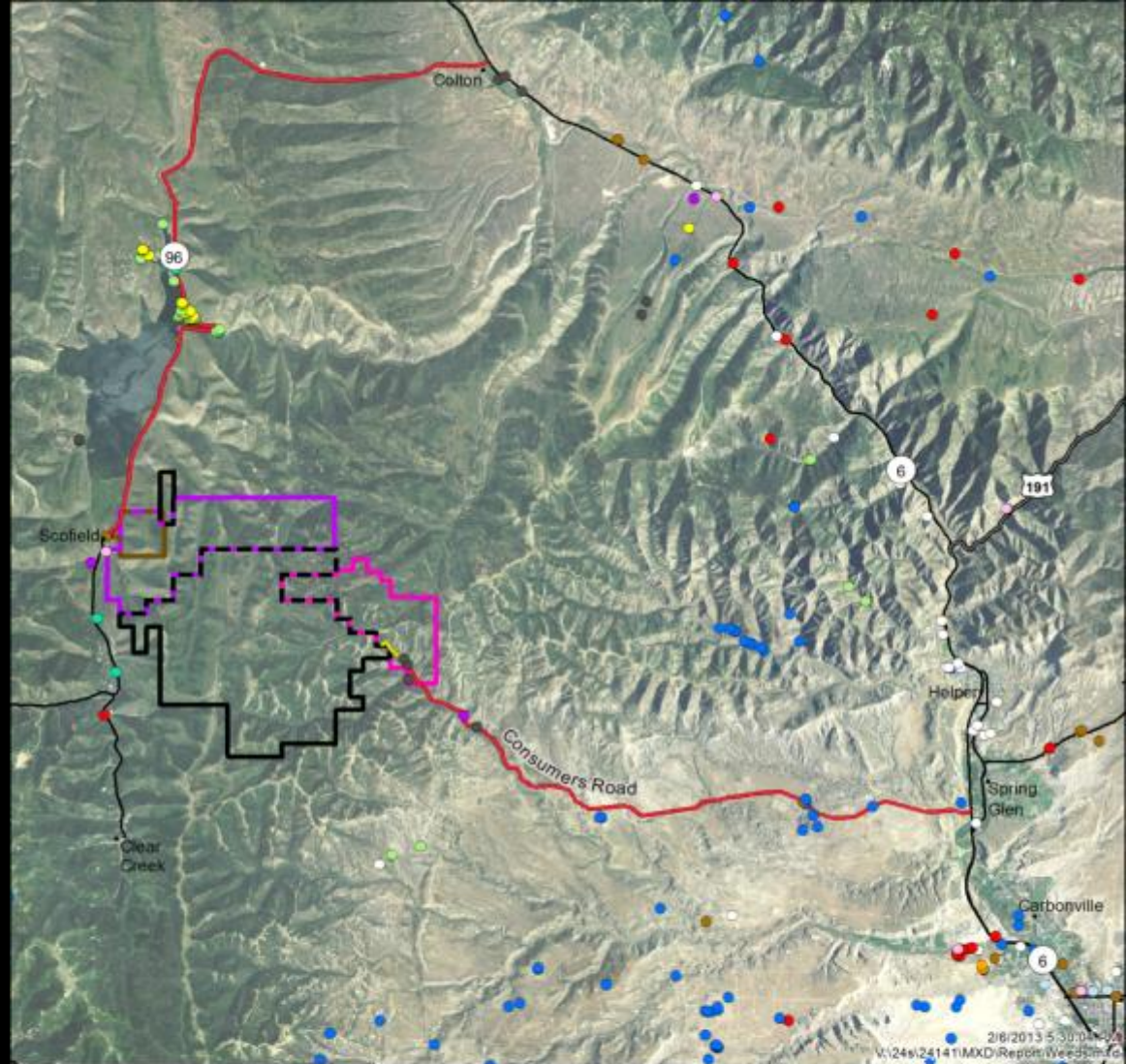
**Transportation**

**Process**





# Weeds



- Long Canyon Tract
- Carbon County Lease
- Horizon Permit
- Kinney No. 2 Mine Permit Boundary
- Haul Routes**
- Dirt
- Paved

## Noxious Weeds

- |  |  |
|--|--|
| <span style="color: black;">●</span> Black henbane             | <span style="color: lightblue;">●</span> Leafy spurge  |
| <span style="color: purple;">●</span> Broad-leaved peppergrass | <span style="color: blue;">●</span> Musk thistle       |
| <span style="color: magenta;">●</span> Canada thistle          | <span style="color: red;">●</span> Russian knapweed    |
| <span style="color: orange;">●</span> Dalmatian toadflax       | <span style="color: brown;">●</span> Scotch thistle    |
| <span style="color: green;">●</span> Dyer's woad               | <span style="color: yellow;">●</span> Spotted knapweed |
|  | <span style="color: white;">●</span> Whitetop          |
|  | <span style="color: cyan;">●</span> Yellow toadflax    |



Imagery taken from National Agricultural Imagery Program (NAIP) natural color aerial photography 1-m resolution, 2011.

Contains Privileged Information: Do Not Release



## Area Enlarged







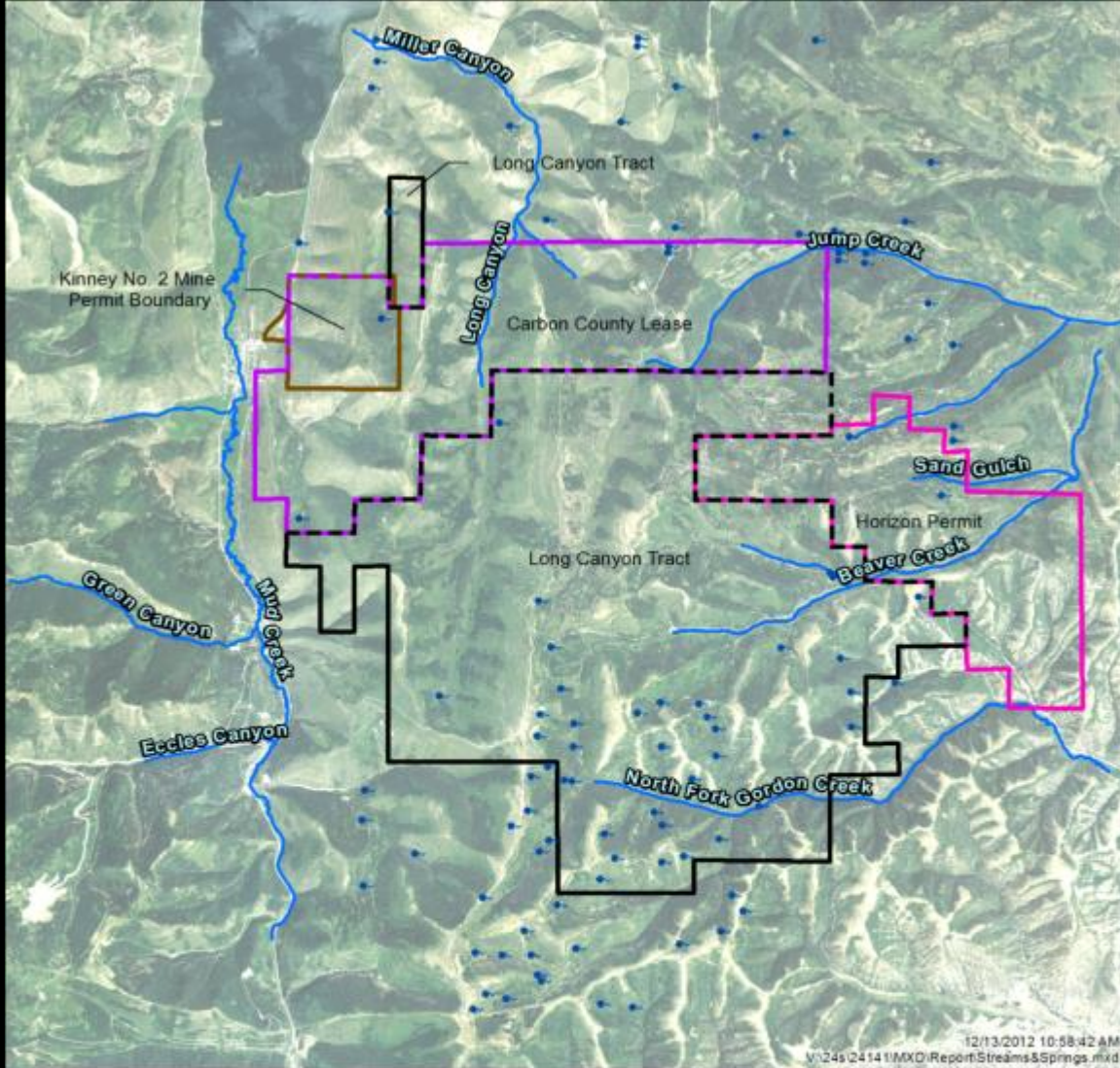
**Water Resources**

**Wetlands/Riparian Zones**

**Vegetation**



# W A T E R



- Spring
- Perennial Stream
- Long Canyon Tract
- Carbon County Lease
- Horizon Permit
- Kinney No. 2 Mine Permit Boundary

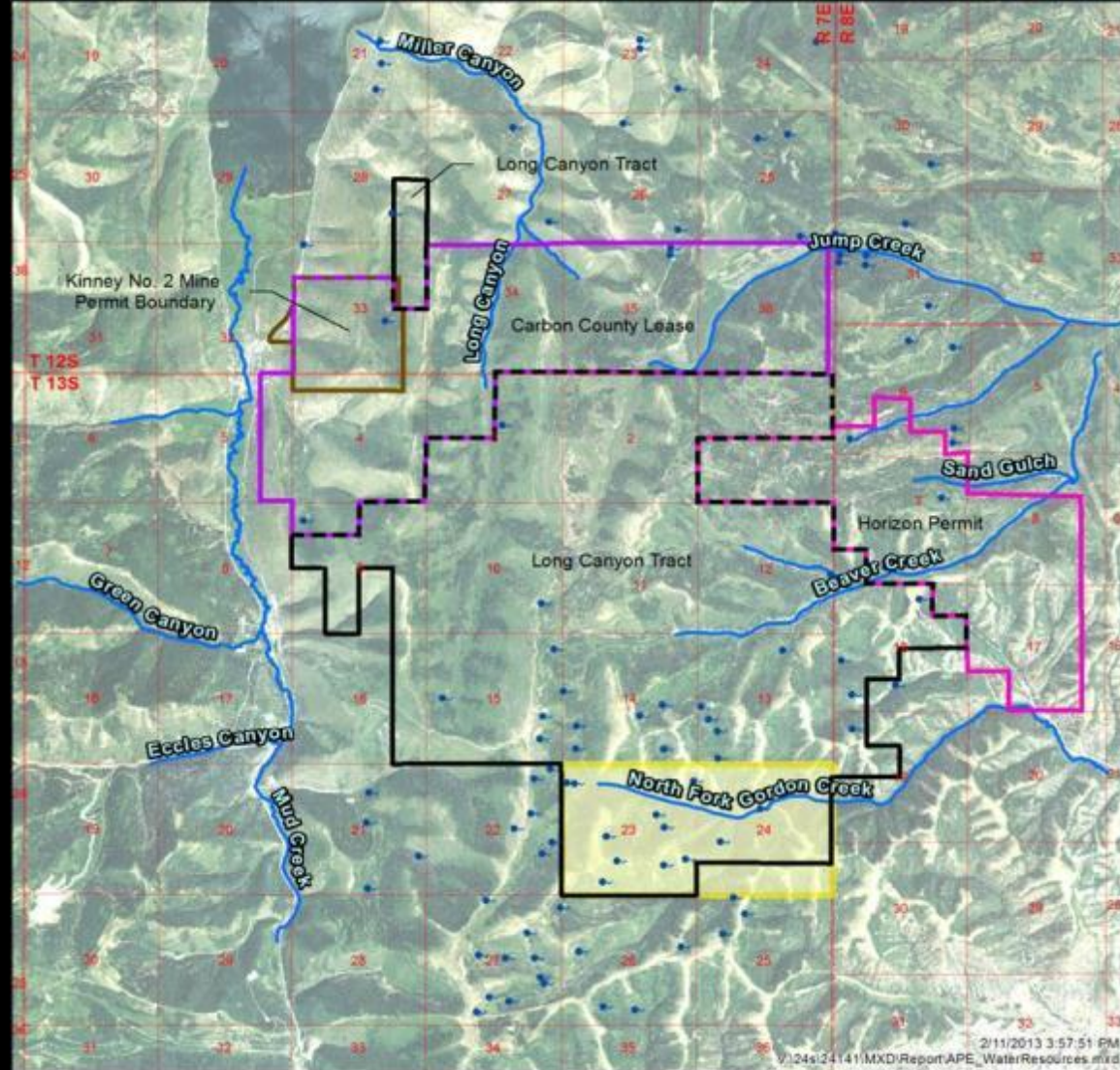


Imagery taken from National Agricultural Imagery Program (NAIP) natural color aerial photography 1-m resolution, 2011

Contains Privileged Information: Do Not Release



# W A T E R



- Spring
- Perennial Stream
- Area of Potential Water Resource Effects
- Long Canyon Tract
- Carbon County Lease
- Horizon Permit
- Kinney No. 2 Mine Permit Boundary



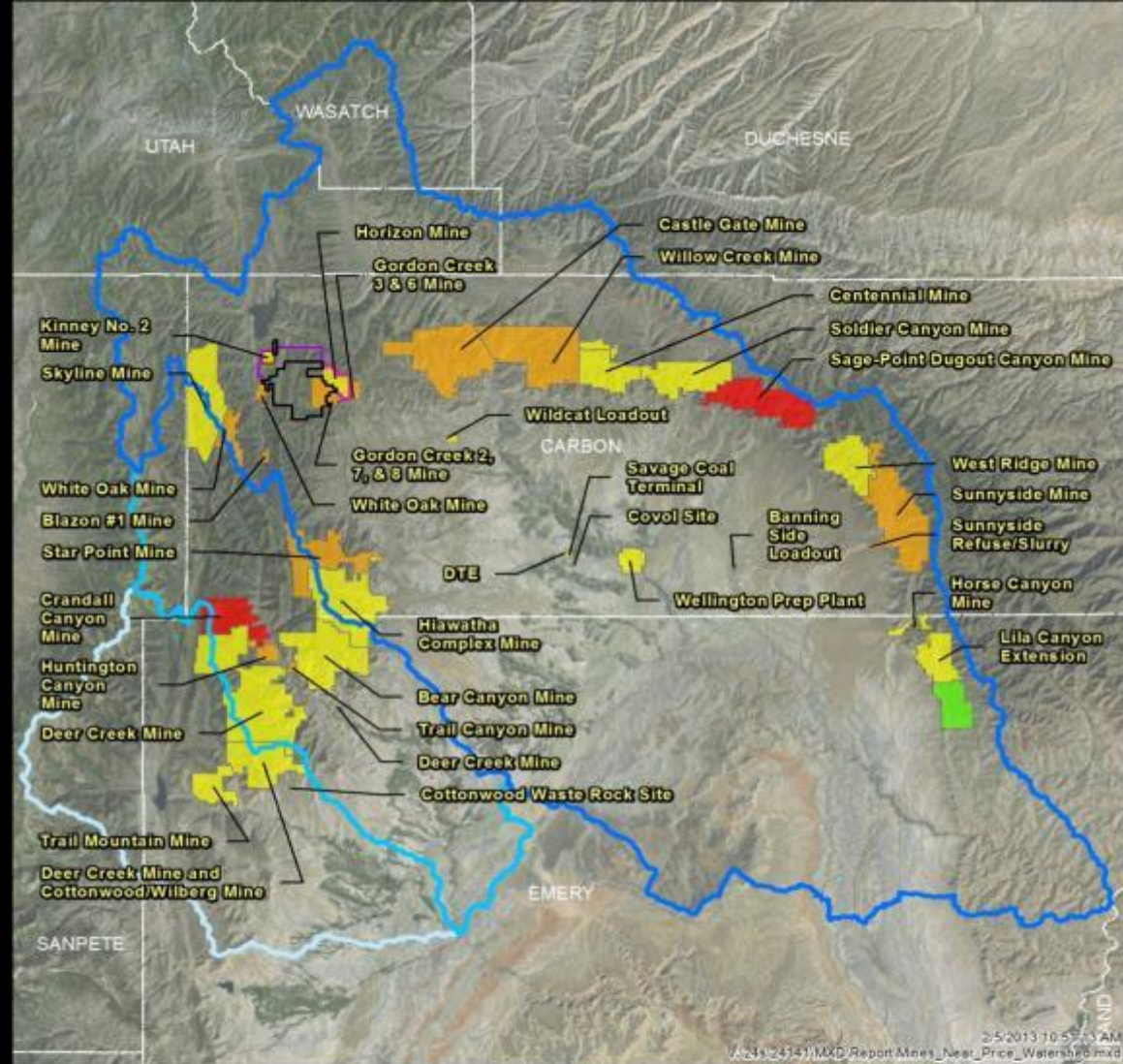
Imagery taken from National Agricultural Imagery Program (NAIP) natural color aerial photography 1-m resolution, 2011.

Contains Privileged Information: Do Not Release





# W a t e r s h e d



- Long Canyon Tract
- Carbon County Lease
- Horizon Permit
- Kinney No. 2 Mine Permit Boundary
- Price Watershed (HUC8)
- Huntington Creek Watershed (HUC10)
- Cottonwood Creek Watershed (HUC10)

- Active Permit
- In Reclamation/Reclaimed
- Inactive
- Unknown

## Area Enlarged

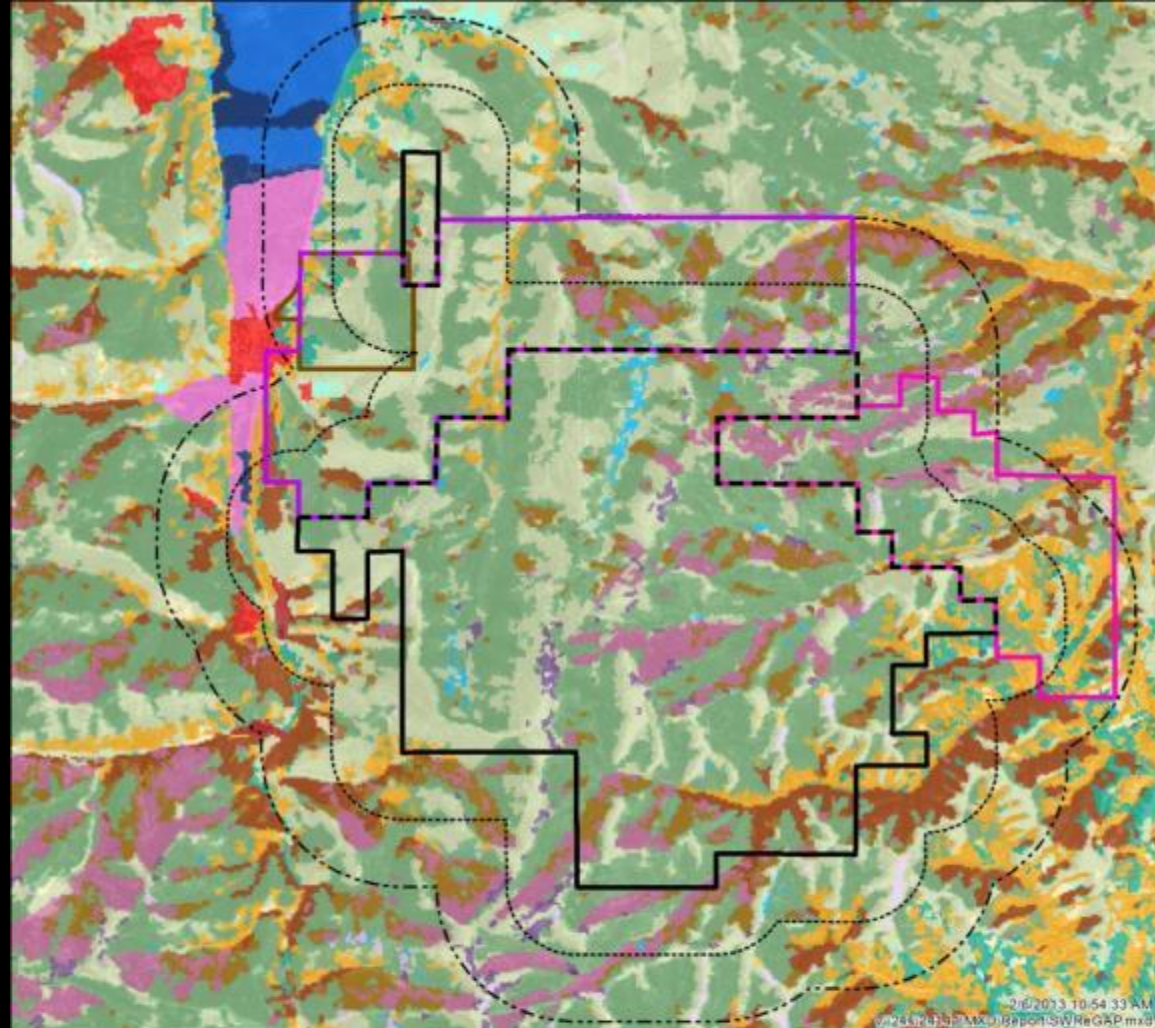


Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, AeroGRID, IGN, IGP, and the GIS User Community  
Contains Privileged Information: Do Not Release





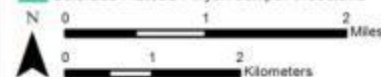
# V e g e t a t i o n



- Long Canyon Tract
- Carbon County Lease
- Horizon Permit
- Kinney No. 2 Mine Permit Boundary
- 0.5-mile Buffer
- 1-mile Buffer

- Agriculture
- Colorado Plateau Mixed Bedrock Canyon and Tableland
- Colorado Plateau Mixed Low Sagebrush Shrubland
- Colorado Plateau Pinyon-Juniper Shrubland
- Colorado Plateau Pinyon-Juniper Woodland
- Developed, Medium - High Intensity
- Developed, Open Space - Low Intensity
- Inter-Mountain Basins Big Sagebrush Shrubland
- Inter-Mountain Basins Montane Sagebrush Steppe
- Inter-Mountain Basins Mountain Mahogany Woodland and Shrubland
- Inter-Mountain West Aspen-Mixed Conifer Forest and Woodland Complex
- Open Water
- Rocky Mountain Cliff and Canyon
- Rocky Mountain Alpine-Montane Wet Meadow

- Rocky Mountain Aspen Forest and Woodland
- Rocky Mountain Dry Tundra
- Rocky Mountain Gambel Oak-Mixed Montane Shrubland
- Rocky Mountain Lower Montane Riparian Woodland and Shrubland
- Rocky Mountain Montane Mixed Conifer Forest and Woodland
- Rocky Mountain Subalpine Spruce-Fir Forest and Woodland
- Rocky Mountain Subalpine Mesic Meadow
- Southern Rocky Mountain Montane-Subalpine Grassland

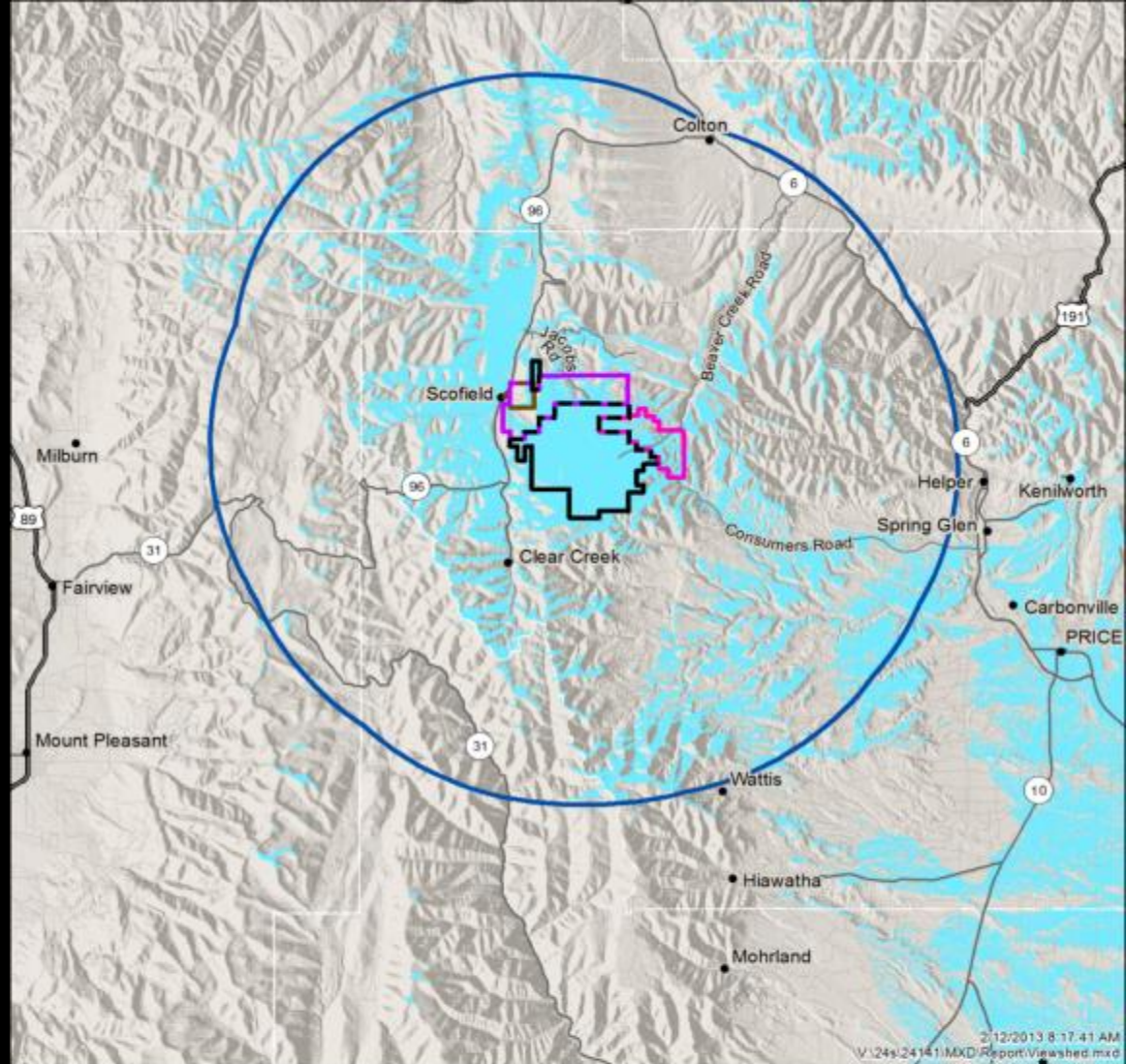


Imagery taken from National Agricultural Imagery Program (NAIP) natural color aerial photography 1-m resolution, 2011.

Contains Privileged Information: Do Not Release



# Visibility



2/12/2013 8:17:41 AM  
W:\249\24141\MXD\Report\Visashed.mxd

- Long Canyon Tract
- Carbon County Lease
- Horizon Permit
- Kinney No. 2 Mine Permit Boundary
- Long Canyon Tract 10-mile Buffer
- Visible\*



\*Visible indicates areas from which at least a portion of the Long Canyon Tract may be visible. Vegetation, structures, and vanishing point are not included in the modeling.  
Contains Privileged Information: Do Not Release

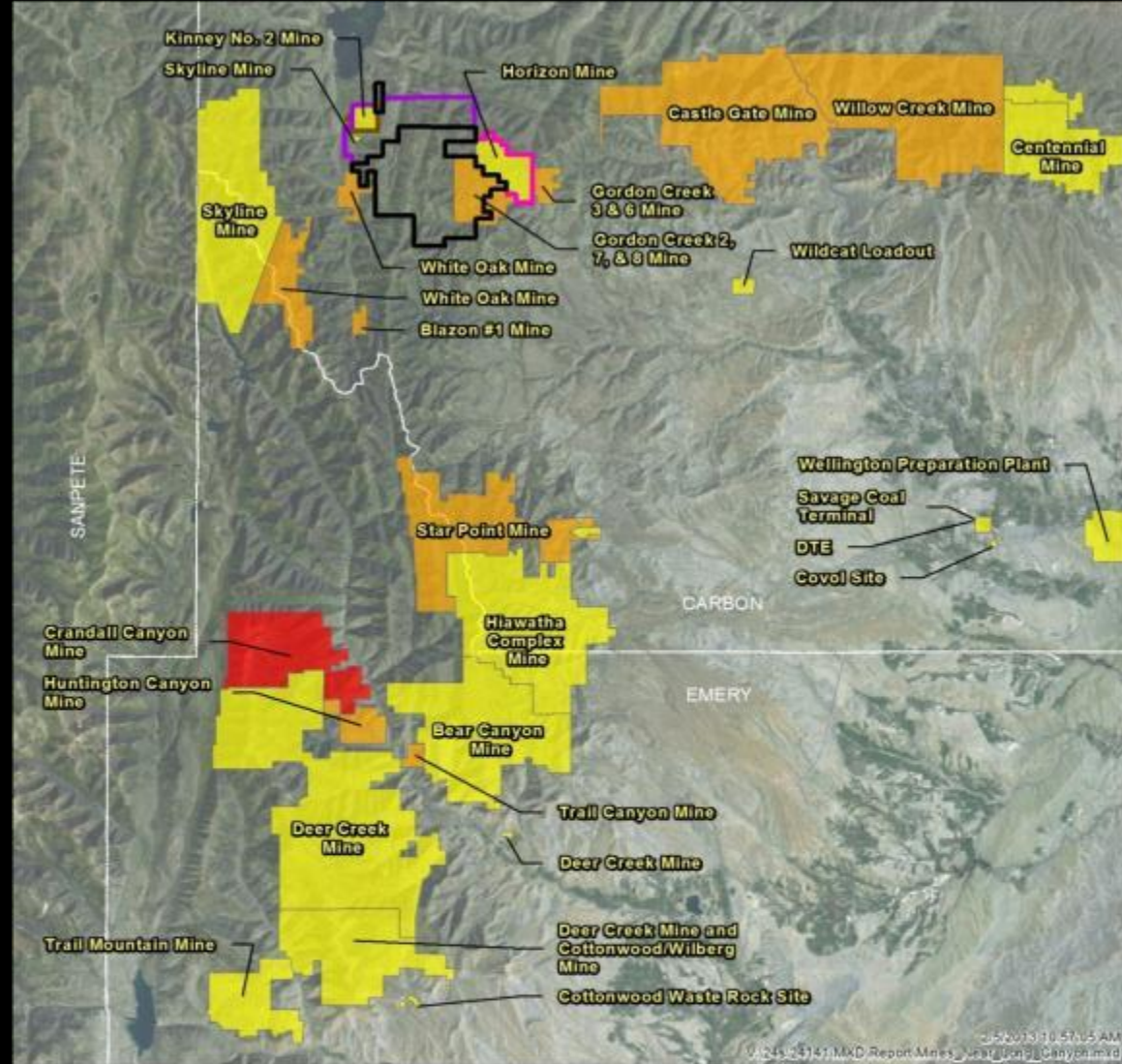


**Area Enlarged**





# Cumulative



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, iSatellite, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community  
Contains Privileged Information: Do Not Release





# Long Canyon Federal Coal Tract

Utah State Office

## **PUBLIC COMMENTS**